

**Audit of the Management and  
Oversight of NARA's  
Energy Savings Performance  
Contracts**

**OIG Audit Report No. 14-01**

**January 30, 2014**

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## Executive Summary

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Over the past 5 years, NARA's leadership in energy management has garnered awards and accolades, including recognition from the two most recent Presidents. In addition, NARA has previously ranked at or near the top of GovEnergy's Federal agency energy progress lists. One of the tools NARA uses in its efforts to achieve its energy efficiency goals includes Energy Savings Performance Contracts (ESPC). Since 1999, NARA has awarded six ESPCs valued at over \$24 million. NARA's most recent Annual Energy and Greenhouse Gas Report highlights the agency's ESPC efforts, stating "the two most innovative and successful projects are the \$5.7 million dollar ESPC project with an 8-year payback at Archives II and the \$5.8 million ESPC project with a 7-year payback at Archives I." These ESPCs are made up of a number of energy conservation efforts, including lighting retrofits, building control optimization, water use reductions, and heating plant improvements.

We reviewed NARA's use of ESPCs to determine if the contracts were adequate, efficient, and resulted in appropriate benefits for NARA. Our review of NARA's ESPCs found insufficient management of the awards, savings verification, payments, reporting, funding, and early cancellations of such contracts. This condition exists due to a general lack of oversight, as well as an inadequate understanding of established controls and requirements instrumental to the success of ESPCs. As a result, NARA has made questionable payments<sup>1</sup> exceeding \$8.4 million, and placed the success of its ESPC energy efficiency efforts and investments at risk. In our semiannual reports to Congress, we have consistently identified Contract Management and Administration in our list of NARA's Top Ten Management Challenges.

The *National Energy Conservation Policy Act of 1978* (NECPA), as amended, established the authority for Federal agencies to enter into multi-year contracts with energy service providers for the implementation of energy savings measures in exchange for a share of the energy savings directly resulting from the implementation of such measures. The *Energy Policy Act of 1992* (EPAct) extended the authority granted to Federal agencies in NECPA. In addition, the EPAct requires the ESPCs to undergo an annual energy audit and to specify the terms and conditions of any Government payments and performance guarantees. Further, the EPAct states aggregate annual payments by an agency to both utilities and energy savings performance contractors, under any ESPC, may not exceed the amount that the agency would have paid for utilities without an ESPC during contract years.

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<sup>1</sup> In the context of this report, "questionable payments" includes payments made without proper verification of energy cost savings.

Our audit identified several opportunities for improvement, which upon implementation will assist NARA in the management and oversight of ESPC projects. We made 10 recommendations to more thoroughly ensure NARA's efforts meet established ESPC requirements and properly verify the guaranteed energy savings of its investments.

## Background

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On April 1, 2013 the National Archives and Records Administration (NARA) Office of Inspector General (OIG) responded to a Congressional Request of the Bicameral Task Force on Climate Change. The Task Force’s request involved assessing NARA’s implementation of climate change and energy sustainability initiatives. Overall, this broad, initial assessment found NARA is meeting the intent of established climate change laws, regulations, and initiatives and—for the most part—NARA actively strives to meet or exceed existing climate change standards and baseline improvement targets. In addition to highlighting NARA’s accomplishments in our response, our initial assessment also identified steps for improvement, which included:

1. Establishing formal assessment criteria for use in determining whether to cancel Energy Savings Performance Contracts (ESPC);
2. Ensuring data used in reporting and payment justification accurately reflects fluctuations in per unit energy costs;
3. Streamlining data gathered from advanced energy meters;
4. Increasing utilization of benchmarking systems;
5. Implementing efficiency criteria for entering into and renewing leases; and
6. Assessing options for greater access to public transportation.

While Business Support Services management generally agreed with these suggested improvements, we informed the Archivist and management of our intent to conduct a follow-on audit to expand upon our assessment, specifically in terms of NARA’s efforts involving the management of ESPCs. This audit report reflects that effort.

NARA is unique in that much of its facility space is used to house Federal records. Preservation and storage condition requirements of these records pose a challenge to implementing energy efficiency measures. However, this has not deterred NARA personnel from reporting noteworthy results while working within this unique set of parameters. Over the past 5 years, NARA’s efforts have been recognized by Presidents Barack Obama and George W. Bush during GreenGov and Leadership in Federal Energy Management Presidential Award Ceremonies. In addition, on February 24, 2010, Vice President Joseph Biden sent a letter of gratitude for NARA’s commitment “to measuring, reporting, and reducing its greenhouse gas emissions.” Further, NARA has previously ranked at or near the top of GovEnergy’s Federal agency energy progress lists.

One of the tools NARA uses in its efforts to achieve its energy efficiency goals includes Energy Savings Performance Contracts (ESPC). Since 1999, NARA has awarded six

ESPC valued at over \$24 million. As noted in the Bicameral Task Force’s initial request, the President issued a memorandum requiring agencies to enhance their building efficiency through performance-based contracts totaling a minimum of \$2 billion across the Federal government. For its part, NARA is in the process of awarding its seventh ESPC with an approximate value of \$5 million. This effort will involve the development and implementation of a bundled ESPC project inclusive of most Presidential Libraries and the Southeast Regional Archives in Atlanta.

Over the years, NARA has entered into a number of ESPCs as part of its response to Federal mandates to reduce energy consumption. The chart below lists these efforts in chronological order of the year awarded.

	ESPC	Year Awarded	Last Annual Payment	Current Status
1	Dwight D. Eisenhower Facility	1999	FY 2012	Completed
2	Ronald Reagan Facility	2002	FY 2017	Payoff—FY 2012
3	John F. Kennedy Facility	2002	FY 2023	Payoff—FY 2012
4	Gerald Ford Facility	2005	FY 2024	Ongoing
5	Archives II Facility	2006	FY 2014	Ongoing
6	Archives I Facility	2010	FY 2018	Payoff—FY 2012

NARA has utilized DOE sponsored ESPCs to implement a number of energy conservation measures (ECMs) specific to the agency’s energy objectives. Examples of these ECMs include heating plant improvements, lighting retrofits, and water use reduction. NARA’s ESPCs are managed by the Office of Facility and Property Management within Business Support Services. The contracting officer who has been responsible for overseeing all six of NARA’s ESPCs is part of the Office of Space Planning and Projects. The Office of Space Planning and Projects is separate from NARA’s primary Acquisitions Office (which is managed under the CFO). As depicted in the chart above, two of the six ESPC projects NARA has awarded since 1999 are ongoing. The Dwight D. Eisenhower Facility ESPC was completed as scheduled in FY 2012 and three other facility ESPCs—Ronald Reagan, John F. Kennedy, and Archives I—were cancelled prior to the end of their contract terms that same year.

## Objectives, Scope, Methodology

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The overall objective of this audit was to expand upon selected improvement steps and underlying issues identified in our initial response to the February 25, 2013 Bicameral Task Force on Climate Change Congressional request. Specifically, our audit focused on the management and oversight of NARA's Energy Savings Performance Contracts (ESPCs).

To accomplish our objective, we interviewed key NARA personnel from the Office of Business Support Services. We reviewed ESPC task order and contract documentation provided by NARA's ESPC contracting officer and Agency Energy Manager. Further, we examined meeting minutes, e-mails, and other documented communications related to NARA's ESPC projects. We compared the information we received related to ESPC negotiations, awards, savings verification, payments, reporting, funding, and cancellations to established requirements and guidance. The criteria assessed and used during our audit included: *National Energy Conservation Policy Act of 1978*, as amended; *Energy Policy Act of 1992*; *Department of Energy Final Rule*, 10 CFR 436 Subpart B; *Energy Independence and Security Act of 2007*; Department of Energy (DOE) Federal Energy Management Program (FEMP) *Practical Guide to Savings and Payments* and *Introduction to Measurement and Verification for FEMP ESPC Projects*; as well as other applicable Executive Orders and ESPC requirements documents.

Our follow-on audit work was performed at Archives II between April 2013 and July 2013, but also included information gathered in March 2013 during the Bicameral Task Force on Climate Change Congressional request assessment. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Audit Results

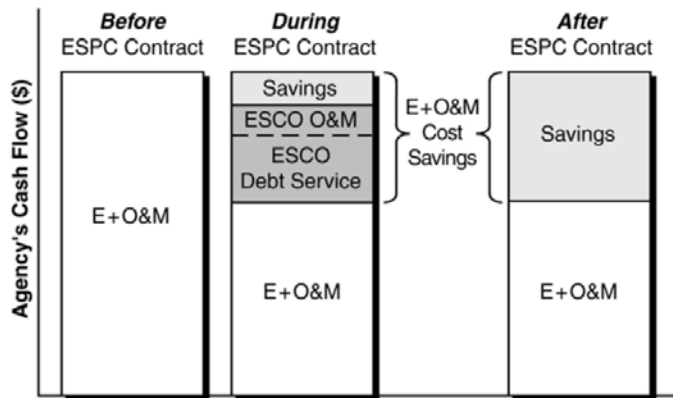
### Management of NARA’s Energy Savings Performance Contracts

NARA has awarded Energy Savings Performance Contracts (ESPC) since 1999. However, contract management efforts were not fully conducted in accordance with established requirements and guidelines. Specifically, we found insufficient management of the awards, savings verification, payments, reporting, funding, and early cancellations of such contracts. This condition exists due to a general lack of oversight, as well as an inadequate understanding of established controls and requirements instrumental to the success of ESPCs. As a result, NARA has made questionable payments exceeding \$8.4 million<sup>2</sup>, and placed the success of its ESPC energy efficiency efforts and investments at risk.

The *National Energy Conservation Policy Act of 1978* (NECPA), as amended, established the authority for Federal agencies to enter into multi-year contracts with energy service providers for the implementation of energy savings measures in exchange for a share of the energy savings directly resulting from the implementation of such measures. These contracts are known as ESPCs. NECPA states, in part, that “a Federal agency may enter into [an ESPC] solely for the purpose of achieving energy savings and benefits ancillary to that purpose.”

The *Energy Policy Act of 1992* (EPAct) extended the authority granted to Federal agencies in NECPA. In addition, the EPAct requires the ESPCs to undergo an annual energy audit and to specify the terms and conditions of any Government payments and performance guarantees. Further, the EPAct states aggregate annual payments by an agency to both utilities and energy savings performance contractors, under any ESPC, may not exceed the amount that the agency would have paid for utilities without an ESPC during contract years. The chart above<sup>3</sup> illustrates this

**ESPCs Reallocate the Federal Customer's Payments for Energy and Energy-Related Operations & Maintenance Expenses (E + O&M)**



<sup>2</sup> See Appendix B “Funds to Better Use” for a list of these costs and payments.

<sup>3</sup> Figure obtained from DOE FEMP’s “Practical Guide to Savings and Payments.”



concept in which energy cost savings are used to cover ESPC expenses incurred by the contracted Energy Service Company (ESCO)—with no increase to agency cash flow. In addition, the EAct tasks the Secretary of the Department of Energy (DOE) with establishing appropriate procedures and methods for use by Federal agencies to select, monitor, and terminate contracts with energy service contractors in accordance with laws governing Federal procurement. DOE’s Federal Energy Management Program (FEMP) provides contract tools and guidance documents to facilitate Federal agency implementation of ESPCs.

Further, Federal agencies are mandated to reduce energy consumption, in part by awarding ESPCs. Most recently, on December 2, 2011, the President issued a memorandum committing the Federal Government to enter into a combined \$2 billion in ESPCs and utility savings contracts by the end of 2013. The President’s memorandum—consistent with previous requirements—states ESPC payments to the ESCO are contingent upon realizing a guaranteed stream of future savings.

#### Energy Savings Performance Contract Negotiations and Awards

NARA has not effectively managed the negotiation and award of its most recent ESPCs. DOE FEMP negotiation and award policies—which include procedures for determining fair and reasonable prices; defining risk, responsibility, and performance requirements; and conducting oversight reviews prior to award—were not consistently or adequately followed. This resulted in questionable costs pertaining to finance procurement fees, measurement and verification reports, interest rate premiums, and pre-acceptance payments. Further, it resulted in NARA issuing modifications shortly after the awards in an effort to address concerns that should have been handled during the pre-award negotiations.

Over the past 13 years, NARA has awarded six ESPCs. Although NARA has undergone reorganizations during this timeframe, NARA’s current ESPC contracting officer was involved in all six awards. NARA’s Director of Facility and Property Management, who oversees the ESPC contracting officer, stated NARA uses a DOE FEMP project facilitator to assist in the award and management of ESPCs. However, even with a DOE contracted facilitator in place—based upon our interviews with personnel from Business Support Services and reviewing documentation provided by NARA’s ESPC contracting officer related to NARA’s most recently awarded ESPC—concerns arose over whether an appropriate level of due diligence was exercised during the award process. DOE FEMP guidance states the following:

“The emphasis on ESPC life-cycle cost-effectiveness seems to have led to the perception in some quarters that price reasonableness is less important, as long as

the project pays from savings. However, the requirement to consider life-cycle cost does not replace or supersede the requirement to comply with Federal Acquisition Regulations and to perform fair and reasonable price determinations with due diligence. The intent is that the prices paid for the advanced ECMs—and for all equipment installed under ESPC—should be fair and reasonable, and in accordance with prices paid for similar equipment in the private sector.”

Following our review of the terms of the Archives I ESPC Post-Acceptance Performance Period Cash Flow Schedule, we brought to the attention of the ESPC contracting officer that NARA had agreed to pay a finance procurement price of \$232,508 in order for the contractor to acquire financing on a principal amount of \$1,103,713. When asked if a finance procurement price equal to 21 percent of the principal was typical of ESPCs, the contracting officer stated bank terms are unfavorable for ESPCs. Further, he stated even greater finance procurement amounts had been paid in some of the earlier ESPC awards.

In addition, DOE FEMP guidance<sup>4</sup> indicates the average cost of measurement and verification (M&V) efforts by the contractor to verify the results of ECMs is 3.86 percent of first-year guaranteed cost savings—and in half of the ESPCs awarded M&V is under 2.5 percent. Even the Archives I ESPC Final Proposal stated “typically, a rule of thumb is that the annual cost of the M&V for an ECM should not exceed 5 percent of the annual savings of the ECM.” However, NARA agreed to pay 6.5 percent of first-year guaranteed cost savings at Archives I—including overhead and profit charges, this percentage rises to 8.4 percent. According to DOE FEMP, these costs are negotiable and dependent upon the agency’s verification needs. M&V fees on some of NARA’s older ESPCs were closer to DOE’s average with costs ranging between 2.9 and 3.5 percent of first-year guaranteed savings.

DOE FEMP guidance identifies the value of examining prices paid in the past to determine whether current prices are fair and reasonable. However, even though NARA agreed to pay \$4.7 million in advance of project acceptance at Archives I, the contract still required a premium of 3.19 percent on the US Treasury Swap Index Rate in order for the contractor to finance an additional \$1.1 million—resulting in a total project interest rate of 5.77 percent. Three years earlier, NARA contracted with the same ESCO and only paid a premium of 0.56 percent over the index rate. Furthermore, NARA paid a 24 percent markup fee on performance period expenses for the Archives II ESPC; however, this increased to an effective rate of 30 percent on the Archives I ESPC project.

NARA’s current CFO, who was not with the agency at the time of the Archives I ESPC award, stated the recent global financial crisis may be the reason the Archives I ESPC

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<sup>4</sup> DOE FEMP “Quick Study: Savings and Performance Guarantees that Work for You.”

had less favorable financing terms in comparison to the previous contract. Such factors should be considered and examined during negotiations. However, as described below, NARA rushed to award the Archives I ESPC in the final days of FY 2009 without adequately performing critical controls that aid in cost negotiation efforts. Further, when asked about the inconsistencies and premiums of these charges, the ESPC contracting officer involved with the award stated “they all come out of energy savings, that’s how [ESCOs] push these, anything they can charge to energy savings they do.” This notion that price reasonableness is less important due to energy savings guarantees is precisely what DOE FEMP guidance warns against.

The ESPC contracting officer stated there was often pressure at year end to spend money on ESPCs without having adequate time to finalize and review contract documents. Again, this was clearly evident in the award of the Archives I ESPC. E-mail communication during the last month of FY 2009 between the ESPC contracting officer, facilitator, ESCO, and DOE demonstrated this hurriedness—which culminated in a number of significant oversights brought to light after the contract award. The following provides a timeline of these events:

September 8, 2009—NARA’s ESPC contracting officer was informed by the ESPC facilitator that DOE will need 2-3 weeks to review the Archives I ESPC proposal and Investment Grade Audit (IGA).

September 14, 2009—NARA had not yet completed a final version of its Request for Proposal (RFP). Instead, at this time, a draft RFP was provided to the ESCO to allow them to begin developing their proposal and IGA.

September 23, 2009—ESCO submitted their 696 page final proposal based on the draft RFP.

September 27, 2009—DOE FEMP project manager performed his initial review of the proposal identifying a number of issues related to the task order schedules and risk responsibility.

September 28, 2009—NARA ESPC contracting officer awards \$4.5 million of FY 2009 funds.

September 30, 2009—DOE contracting officer identifies significant concerns with the Archives I ESPC task order and requests modifications to correct the issues within 30 days.

In one exchange during this timeframe, DOE stated there was a 60 percent chance that they would be able to review and approve the Archives I ESPC IGA prior to year end because this voluminous, highly technical and detailed document was not expected to be provided until September 25, 2009 (four business days before the end of the fiscal year). NARA’s ESPC contracting officer responded, stating “well I got news for you all, I am

going to issue the obligation for the year 0 funds. So the review and official approval can follow in due time.” Further, when the ESPC contracting officer sent an e-mail notifying the ESCO, DOE, and ESPC facilitator of the award, he also stated he presumed DOE forms referenced in the award “will get corrected.” When asked about why the RFP was still in draft and the DOE contract schedules still needed to be corrected at the time of the award, the ESPC contracting officer stated it is typical for documents not to be finalized prior to award. Further, The ESPC contracting officer stated he was under pressure to obligate the money before year end.

After receiving notice of the September 28, 2009 award of the Archives I ESPC, DOE’s contracting officer—responsible for ensuring that the terms and conditions of the ESPC indefinite delivery/indefinite quantity contracts are adhered to by the ordering agency and the ESCO—expressed his disappointment in not being involved in the project early on and not being able to review the final proposal prior to award. His “quick and cursory look” identified a number of concerns including: 1) possible circumvention of DOE’s One-Time Payment Policy in the \$4.5 million award, 2) significant unauthorized revisions to each of the task order schedules, 3) improper completion of the Risk, Responsibility, and Performance Matrix, and 4) deviations from Individual Small Business Subcontracting Plan requirements.

Each of the concerns identified by the DOE contracting officer in his initial review highlight important activities and controls that should be finalized during ESPC negotiations and prior to award. In terms of the possible circumvention of one-time payment policy, DOE FEMP states one-time payments made prior to acceptance must be made in the same contract year in which the underlying energy or energy-related savings occurred, and the savings and associated payment must appear in the same year on the task order financial schedules. Additionally, the payments must be from savings that result from the ESPC project. Although a revised, post-award Archives I ESPC task order later listed \$4.7 million in guaranteed cost savings during the implementation period, the ECMs expected to generate those savings were not appropriately verified prior to the contract’s cancellation and pay off. This is discussed in more detail in the “ESPC Verification and Payments” section of the report.

Further, one of the other concerns identified by DOE pertained to the Risk, Responsibility, and Performance Matrix. According to DOE guidance, this matrix—when properly utilized prior to award—is a useful tool that balances costs and benefits, helping the agency negotiate a deal that uses the agency’s resources effectively, makes good business sense, and yields optimum value. By not properly completing this matrix prior to negotiations and rushing to award the Archives I ESPC at the end of FY 2009, NARA placed itself at risk of not receiving the most advantageous pricing available. In

addition, as a result of DOE's concerns, on October 28, 2009 NARA modified the Archives I ESPC which included revisions to the final financial schedules and final proposal.

#### Energy Savings Performance Contract Verification and Payments

NARA has not effectively managed its process for verifying ESPC cost savings used in making ESCO payments. Specifically, NARA has not consistently obtained or reviewed M&V reports in verifying the achievement of energy cost savings guarantees as required by Federal and DOE policy. Instead, NARA inaccurately relied upon utility cost summaries which did not verify true energy cost savings. As a result, NARA made questionable payments in excess of verified savings.

After NARA awards an ESPC, it is required to verify whether guaranteed energy savings are achieved and ensure aggregate annual payments under the contract do not exceed the amount the agency would have paid for utilities without the ESPC. Further, guaranteed cost savings to the Federal customer must exceed payments to the contractor in every year of the task order term. As stipulated in the EAct, this verification is to be conducted through annual energy audits. 10 CFR 436 further defines these requirements, stating after contractor implementation of ECMs and annually thereafter during the contract term, an energy audit shall be conducted by the Federal agency or the contractor as determined by the contract. The annual energy audit shall verify the achievement of annual energy cost savings performance guarantees provided by the contractor.

Similarly, DOE FEMP requires ESCOs to guarantee that the energy-efficiency improvements implemented through the ESPC project will result in a specified level of cost savings to the Federal agency and that these cost savings will be sufficient to pay the ESCO for its work over the term of the contract. In addition, DOE FEMP stipulates the agency is always responsible for reviewing and accepting or contesting the conclusions of the annual M&V report—which serves as the annual energy audit noted in the requirements above. Therefore, both the ESCO and Federal agency have a role in ensuring that ECMs financed by the ESCO generate the guaranteed savings throughout the term of the contract. The guarantee of a specified level of cost savings is at the heart of ESPCs—M&V strategies provide assurance that such guarantees are met.

DOE FEMP guidance also identifies reasons—beyond satisfying the law—to perform ESPC verification. Properly applied, M&V can:

- Accurately assess energy savings for a project,
- Allocate risks to the appropriate parties,

- Reduce uncertainties to reasonable levels,
- Monitor equipment performance,
- Find additional savings,
- Improve operations and maintenance,
- Verify cost savings guarantee is met, and
- Allow for future adjustments as needed.

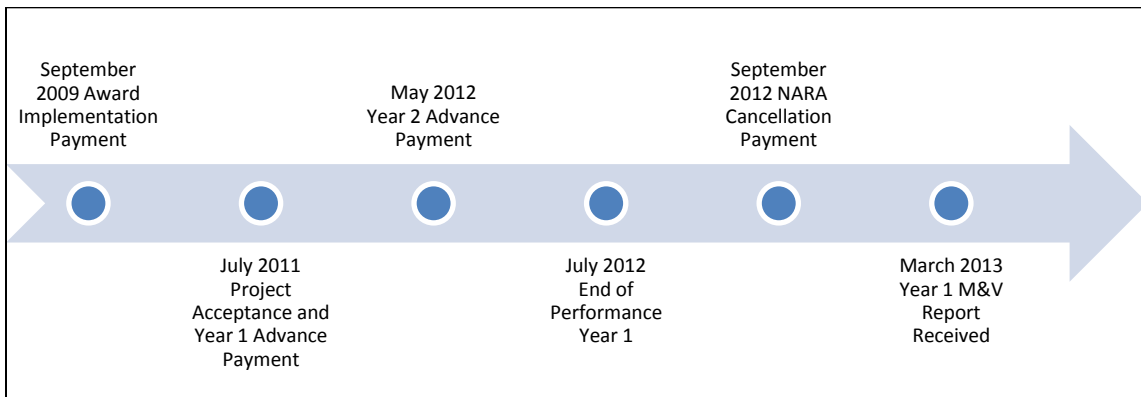
According to the contract documentation reviewed for the John F. Kennedy Library, Archives I, and Archives II ESPCs, the ESCOs are responsible for conducting M&V activities. NARA agreed to pay these ESCOs annually on average \$26,109 (plus an additional 24 percent or more in indirect costs and profit charges) per facility to provide M&V reports. As mentioned earlier, NARA is responsible for reviewing—and contesting when need be—the M&V reports in order to verify energy cost savings and to pay the ESCOs accordingly. However, during interviews with Facility and Property Management personnel responsible for conducting the M&V report reviews, we learned such efforts often did not take place. When asked about the lack of M&V review, the Director of Facility and Property Management stated the reports were very large and complex, and that NARA may lack the technical resources necessary to provide an appropriate and complete review.

While reviewing a sample of M&V reports provided by the Agency Energy Manager for the Archives I and Archives II ESPCs, we identified a number of concerns. For example, the annual savings verification tables of the Archives II M&V report were set up to show baseline usage, post-installation use, and savings. However, in some cases, data measurements were left blank with no indication of what produced the reported cost savings. In another example—which involved the installation of high-efficiency lighting retrofits at Archives II—the verification sampling used to measure the success of the ECM only consisted of 0.2 percent of the total retrofitted population. Further, the testing reports documenting the verification of the high-efficiency lighting retrofits indicated 14 percent of the sample had burned out lamps. In addition, the majority of the Archives II ECM M&V Activities and Results reported “no measurements were taken during this period.”

Issues were also identified in the Archives I M&V report. One example includes an ECM involving the installation of a new hot water plant to supply the facility’s steam and hot water needs, offsetting NARA’s dependence on General Services Administration (GSA) provided steam. However, in calculating verified savings, the M&V report did not incorporate the added expense of increased water usage necessary to generate the steam in-house. According to information provided by the Agency Energy Manager, Archives I water expense increased over \$80,000 in FY 2012—the first full year after

project acceptance. However this was not reflected in the verified savings chart of the M&V report. In a separate example, NARA paid the ESCO to install low flow aerators and nozzles throughout the Archives I facility. The ESCO based savings on the proposed lower flow rates of the new fixtures compared to the original fixtures—also factoring in reduced hot water usage expenses. According to the M&V report, the ECM’s “guaranteed savings are being achieved.” However, in examining the ESCO’s verification inspection report for this ECM, we discovered 33 percent of the faucets sampled had to be changed back to the original fixture due to a lack of hot water flow. This calls into question whether guaranteed savings are being achieved as reported. Further, a number of the measurement readings used for the February 2013 Archives I M&V report had not been taken since January 2012.

It is NARA’s responsibility to review the ESCO M&V reports and contest verification issues. Additionally, if the ESCO is not actually conducting adequate verification activities during the period, NARA should assess whether full payment is appropriate. Further, in some cases, M&V reports were not provided in time for adequate review or on an annual basis as required. For example, the chart below illustrates the Archives I ESPC timeline of events as it relates to contract performance years, payments, and M&V report completion.



As depicted above, NARA made four payments (implementation, year 1, year 2, and cancellation) all prior to receiving the first M&V report. Therefore, despite the annual requirement, the first M&V report was not issued until a year and a half after the project was accepted—and more than five months *after* NARA notified the ESCO of its intent to cancel the contract.

According to DOE FEMP “only ‘real savings’ may be applied to contractor payments; that is, the savings must be reflected as reduced expenses in the agency’s accounts for energy or related O&M. Payments must come from money that the government was either already spending or planning to spend, which can now be redirected because of the

energy work that is done under the ESPC. Only real savings, by definition, will make money available for contractor payments.” Additionally, as previously stated in the requirements, M&V reports shall verify the achievement of annual energy cost savings performance guarantees provided by the contractor. However, prior to cancelling the Archives I contract in September 2012, NARA had made advanced payments totaling \$5,314,219—which were identified as guaranteed savings by the contractor in the Archives I ESPC task order schedule—yet, as noted, NARA did not receive the first M&V report until March 2013. Therefore, there is no way the agency could have appropriately verified the achievement of the annual energy cost savings performance guarantees. To further the issue, NARA cancelled and paid off the contract—at a cost, including cancellation fees, of \$994,960—again, prior to receiving the first M&V report, thus forfeiting recourse should the unverified energy cost savings not materialize.

During an interview with the ESPC contracting officer, he stated payments were contingent upon review of the M&V reports. When we informed him that the M&V reports were often times not provided until after the payments were made he stated any unrealized savings identified in the M&V reports would result in equitable adjustments in the following year. However, as noted above—and in the pay off of other ESPCs at the end of FY 2012—NARA cancelled contracts before receiving the information necessary to justify payments already made and to verify the guaranteed energy cost savings were achieved. When we informed the ESPC contracting officer of the lack of timely M&V reporting he contacted the Archives I ESCO to inform them NARA needs a year 2 M&V report, stating the agency should have received it soon after the September 2012 cancellation. However, providing a report that verifies energy cost savings after the contract has been cancelled and paid off provides little value, as—according to the ESCP contracting officer—the ESCO is no longer responsible for guaranteeing cost savings.

NARA’s Agency Energy Manager, whose responsibilities include authorizing ESCO payments, acknowledged that the M&V reports NARA paid for were not always reviewed. Instead, both the Agency Energy Manager and the Director of Facility and Property Management stated they were able to verify cost savings by reviewing facility energy bill totals and comparing these costs to their respective base year totals. However, considering all the factors that impact facility energy bills, this process does not provide adequate support for energy savings verification. The inadequacies of NARA’s verification method are described in the paragraphs below.

The Agency Energy Manager provided the spreadsheet he created to facilitate utility cost comparisons. The totals calculated in the Agency Energy Manger’s spreadsheet matched those reported in NARA’s Annual Energy and Greenhouse Gas Report to OMB and DOE. The chart below contains data from the annual report, as well as ESCO payment



information gathered from the ESPC contracting officer. Using this data for the ongoing Archives II ESPC, we compared the total reduction in utility costs with the total ESCO payments. This comparison revealed an excess of payments over savings totaling \$660,223—therefore, it does not appear to provide the justification for additional payments as claimed by Facility and Property Management personnel.

Archives II Energy Consumption and Savings							
Fiscal Year	Electric (MWH)	Reduced Electric from base year	Natural Gas (Million Cubic Feet)	Reduced Natural Gas from base year	Total Utility Cost	Reduced Total Utility Cost from base year	NARA Payment to ESCO
2008 (base year)	36,400.5	--base--	96.6	--base--	\$5,400,230	--base--	\$897,871
2009	34,827.4	1,573.1	78.7	17.9	\$4,996,324	\$403,906	\$916,531
2010	34,580.3	1,820.2	80.9	15.7	\$4,792,376	\$607,854	\$935,578
2011	34,237.9	2,162.6	78.4	18.2	\$4,221,947	\$1,178,283	\$955,022
2012	32,156.2	4,244.3	74.1	22.5	\$3,570,625	\$1,829,605	\$974,869
Totals						\$4,019,648	\$4,679,871
Difference						<b>\$660,223</b>	

34,237.9 (32,156.2) <hr/> <b>2,081.7</b>	\$4,221,947 (\$3,570,625) <hr/> <b>\$651,322</b>
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In addition, other factors further skew the results of the basic utility cost approach NARA used in verifying cost savings. Continuing with the Archives II example, in the time since NARA accepted the ESPC’s ECMs, other non-ESPC related activities took place that account for a significant portion of the utility bill price reductions. These activities include an environmental study/pilot program on record storage and negotiation efforts on utility rate charges.

During FY 2012 NARA participated in a pilot program to develop new environmental settings for records storage at Archives II. The goal of this effort was to extend the life of records while achieving significant energy savings. According to the Executive for Business Support Services, this project—separate from the Archives II ESPC—“was the primary driver of dramatic energy savings in FY 2012,” resulting in a decrease of over 2,000 megawatt hours (MWH) per year during the study. As shown in the chart above, the reduction reported at Archives II between FY 2011 and FY 2012 was 2,081.7 MWH. The Executive for Business Support Services stated “nothing has been done that would produce energy savings of that magnitude in FY 2012 other than [this pilot program].” Further, during the January 15, 2013 All Hands meeting, the Archivist stated this effort generated “material savings of about \$650,000.” The difference between the FY 2011 and FY 2012 total utility costs shown in the chart above totals \$651,322. Therefore, if these savings are a result of the environmental settings program—as reported by senior NARA officials—they should not also be attributed to savings of the Archives II ESPC effort, which had been started and in place years prior.

In addition, during this same time period, due to newly negotiated GSA rates, NARA’s utility rates were substantially reduced in terms of unit cost for both gas and electric. For example, based on data provided by the Agency Energy Manager and reported in NARA’s Annual Energy and Greenhouse Gas Report, one MWH of electricity in FY 2008 cost \$110.02; however, in FY 2012 it was reduced to \$90.01—this is a reduction in cost of 18 percent due solely to electric utility rates. Further, in FY 2008, one thousand cubic feet of natural gas cost \$12.70; however, in FY 2011 the cost was reduced to \$7.90—a drop of 38 percent. These material drops in utility rates give the false impression that the Archives II ESPC efforts are responsible for \$1,665,812 in energy cost savings during FY 2011 and FY 2012.

Total reported Archives II reduction in utility costs from base year (FY2008-2012)	\$4,019,648
Total Archives II contractor payments	(\$4,679,871)
Excess payments over gross utility savings	(\$660,223)
Non-ESPC environmental settings project savings	(\$650,000)
Utility rate reduction savings	(\$1,655,812)
<b>Excess payments over net utility savings</b>	<b>(\$2,966,035)</b>

Taking these factors into consideration, the chart above illustrates how utility cost decreases alone do not provide verification of ESPC energy savings to which ESCO payments are substantiated. Payments made to the Archives II ESCO exceed savings by \$2,966,035 when calculated using the Facility and Property Management’s verification method.

Similarly, in terms of the Archives I ESPC, just prior to cancelling the contract, payments to the ESCO had exceeded energy savings by over \$4.7 million using NARA’s utility bill verification method—taking into consideration negotiated utility rate reductions. However, as mentioned previously, NARA agreed to pay an additional \$994,960 to cancel the Archives I ESPC early at the end of FY 2012, which further increased the spread between excess payments and utility cost savings. By not consistently reviewing and analyzing M&V reports, but instead simply comparing annual utility cost reductions between the base year and the current year, NARA has not ensured savings realized cover contractor payments.

Energy Savings Performance Contract Reporting

NARA management did not provide proper oversight and review of its most recent annual Energy and Greenhouse Gas Report—as it relates to ESPCs—issued to DOE and OMB. Executive Order 13514 emphasizes accountability and transparency as it relates to

agency energy disclosures. However, in its annual report, NARA highlighted the success of a 7-year payback ESPC, even though the contract had already been cancelled and its year 1 M&V report had not yet been received. Further, NARA substantially underreported its total ESPC payments for the year.

The *Energy Independence and Security Act of 2007* requires each Federal agency to compile and submit to the Director of OMB an annual Government efficiency status report. In part, to comply with this requirement, NARA issued its FY 2012 Annual Energy/Green House Gas Report on January 24, 2013. In this report, NARA stated “between fiscal years 2006 and 2012, NARA invested several million dollars in energy efficiency projects. The two most innovative and successful projects are the \$5.7 million ESPC project with an 8-year payback at Archives II and the \$5.8 million ESPC project with a 7-year payback at Archives I.” However, as mentioned previously, the success of these projects has not been adequately verified. Further, the Archives I ESPC was cancelled nearly four months before the report was issued, yet there was no mention of this in the report to OMB.

In addition, NARA reported to DOE and OMB total ESPC contractor payments of \$2.3 million in FY 2012. This amount included annual payments for the Archives I and Archives II ESPCs, as well as the Archives I cancellation fee. However, the actual ESPC payments and cancellation fees for FY 2012 totaled more than \$10.7 million. NARA’s Agency Energy Manager acknowledged this information was misreported, stating only the Archives I and Archives II payment data was available when he completed the OMB Report. However, the payments for all of NARA’s cancelled ESPCs had been obligated by September 26, 2012 and paid by November 2012—months prior to the issuance of NARA’s annual report to OMB.

Executive Order 13514 “Federal Leadership in Environmental, Energy, and Economic Performance” dated October 5, 2009, emphasizes accountability and transparency as it relates to agency energy disclosures. Further, the executive order states “agencies shall prioritize actions based on a full accounting of both economic and social benefits and costs and shall drive continuous improvement by annually evaluating performance.” As noted previously, NARA has consistently received accolades from the White House in part for its reporting efforts. However, the examples above illustrate a need for greater transparency and accuracy in NARA’s reporting specific to ESPCs.

#### Energy Savings Performance Contract Cancellations

NARA management did not properly ensure ESPC cancellations and pay offs were conducted in accordance with Federal and DOE requirements. Specifically, NARA

cancelled ESPCs without appropriately verifying energy cost savings and against the guidance of FEMP personnel. Further, in paying off the contracts, NARA obligated funds in excess of established termination liability ceilings, paid for services that had yet to be performed, and made payments using funds unrelated to energy savings. As a result, NARA made questionable payments to the ESCOs and forfeited guaranteed energy cost savings—whereby NARA now assumes the risk that millions of dollars in previously unverified cost savings will be realized in the future.

At the end of FY 2012 NARA cancelled three of its remaining five ESPCs. The following chart provides detail on these cancelled contracts:

ESPCs Cancelled in FY 2012	Year Awarded	Years Remaining	Cancellation Date	Amount Obligated at Cancellation
Ronald Reagan Facility	2002	5	9/26/2012	\$680,090.25
John F. Kennedy Facility	2002	11	9/26/2012	\$6,748,557.54
Archives I Facility	2010	6	9/26/2012	\$1,074,140.55
<b>Total</b>				<b>\$8,502,788.34</b>

DOE FEMP policy on one-time payments and cancellations states “in an effort to avoid improper payment application, the following guidance will govern an agency’s one-time payments under an ESPC.” Specifically, in terms of Terminations and Cancellations, DOE FEMP states:

- Under limited circumstances, such as by Federal agency mandate or as a result of Congressional action, a one-time payment may be required for purposes of partially or fully terminating or cancelling an ESPC task order or ECMs. (Examples: Base Realignment and Closure, facility use changes, or privatization). In such an instance, the type of funds allowed for use in terminating the ESPC is not limited to energy cost savings, energy-related cost savings, or avoided-cost funds.
- Payments for terminations or cancellations other than as described above must come from energy cost savings or energy-related cost savings. If a partial termination, the remaining ECMs must represent a viable ESPC project, with savings exceeding payments in the remaining years of the term. This type of termination or cancellation may require higher agency approval.
- Terminations for convenience or default must be considered in accordance with Federal Acquisition Regulations.

In a meeting with the Director of Facility and Property Management he stated the cancellations of the ESPCs listed above were not a result of a mandate. As mentioned in DOE FEMP policy, non- mandated/Congressionally directed ESPC cancellation

payments are restricted to energy and energy-related cost savings. DOE FEMP defines “energy cost savings” as a reduction in the cost of energy, water, or wastewater treatment from the baseline cost established in the ESPC. Energy cost savings are generally recurring savings that occur year after year. Further, “energy-related cost savings” is defined as a reduction in expenses (other than energy cost savings) related to energy-consuming equipment, generally related to equipment operations, maintenance, renewal, replacement, or repair expenses.

### *Cancellation Approval*

In an interview with the CFO on March 25, 2013, he stated the ESPC contracting officer had received approval from DOE FEMP to pay off the ESPCs early. When we spoke with the ESPC contracting officer, he stated DOE FEMP does not provide approval or disapproval of ESPC cancellations. Instead, the ESPC contracting officer provided a copy of a July 27, 2012 e-mail from the Director of Facility and Property Management to the CFO in which the Director stated he had contacted DOE FEMP and was told that it is not a good idea to pay off an ESPC early unless it is within a year or two of the end of the contract, because once it is paid off the agency loses all energy savings guarantees. As noted previously, each of NARA’s three cancelled ESPCs in September 2012 had remaining contract terms between five and 11 years. Further, the Director stated “the ESCOs have a vested interest in keeping the equipment fine tuned and running correctly to meet the guaranteed annual savings which they have to prove via the annual M&V process—you of course would lose that if you paid it off.”

Despite this information, the CFO presented the ESPC “termination for convenience” as a proposed year-end contracting vehicle during a September 12, 2012 Executive Leadership Team Meeting. The meeting handout the CFO provided included “net savings from early pay-off” for each of NARA’s remaining ESPCs. However, it did not include information related to verified energy and energy-related cost savings, which, as noted earlier, are required of cancellation payments. According to the CFO, the executive team approved the ESPC cancellations.

During a June 27, 2013 interview, the CFO stated he relied heavily upon savings calculations provided by the ESPC contracting officer—which was reflected in the information presented to the Executive Leadership Team. These calculations—discussed in the following section of the report—were not completely accurate because the cost benefit analysis used by the CFO only looked at limited payment related information and did not include consideration for established ESPC cancellation and verified savings requirements.

*Cancellation Decision Considerations*

Business Support Services personnel expressed a number of considerations that factored into the decision to cancel and subsequently pay off three ESPCs at the end of FY 2012. When we initially met with the CFO, he stated “the contract work is all done up front so it does not matter if NARA pays the ESPCs off early, the work is already done.” However, the “up front” work is only one component. As noted earlier in Federal and DOE policy, the underlying objective of an ESPC is ensuring the energy savings realized from the contract surpass the cost of undertaking the project. By paying off the contract early, this guarantee is lost.

DOE FEMP guidance states the ESCO is responsible for ensuring the performance of new equipment installed as part of the ESPC throughout the duration of the contract term. Further, even though the responsibility for hands-on performance of O&M may be retained by the agency, the ESCO is responsible for guaranteed savings of the contract and thus ultimately responsible for all O&M related items. Similarly, 42 U.S.C. § 8287 states “any such performance guarantee shall provide that the contractor is responsible for maintenance and repair services for any energy related equipment.” This was further expressed in the previously described e-mail from the Director of Facility and Property Management on July 27, 2012, in which he told the CFO the ESCOs retain a vested interest in keeping the equipment fine tuned and running correctly to meet the guaranteed annual savings.

Although the current CFO was not employed at NARA at the time of its ESPC awards, he stated NARA may have used ESPCs because the agency did not have the necessary up front funding for ECMs, but expected to have enough to pay them off early in upcoming years. However, as detailed previously in Federal and DOE policy, not just any funding may be used to cancel ESPCs. Payments for terminations or cancellations must come from energy cost savings or energy-related cost savings—something NARA has not properly or consistently verified. Further, this “lack of up front funding” scenario does not reflect NARA’s most recent ESPC project. As stated previously, NARA provided the Archives I ESPC contractor \$4.7 million in pre-acceptance funding in order to complete a project consisting of five ECMs. If NARA expected to have enough money to pay off the contract in upcoming years, the agency could have paid for four of the ECMs outright and completed the fifth ECM when the expected funding became available—reducing the total cost of the project by approximately \$730,000 over the life of the contract. However, as noted previously, NARA did not provide itself much opportunity to examine such options when it rushed to award the ESPC in the final days of FY 2009.

When interviewed, NARA's Agency Energy Manager and ESPC contracting officer both indicated the reason for the cancellations was a result of having end of year money available that needed to be spent before it expired. The CFO acknowledged an end of year pooling of previously allocated funds was used to pay off the ESPCs, but he later added that having these funds available was not the reason for the cancellations as suggested by Facility and Property Management personnel. Instead, he stated the pay offs were made because the agency was anticipating large future cuts. Therefore, by paying off the ESPCs early, future year payments would not be necessary, resulting in reduced costs in out years. Similarly, Facility and Property Management personnel described ESPC cancellations in terms of a mortgage/car loan, where the early pay off results in interest finance savings as well as an end to future recurring payments. However—aside from the statutory constraints on what funding can be used—a major difference between a simple car loan and an ESPC is that ESPCs guarantee the ECMs an agency invested in produce the results promised over the term of the contract. This guarantee, as stated previously, is lost when the ESPC is cancelled.

In addition, calculations and compilations made by the ESPC contracting officer and used by the CFO in his presentation to the Executive Leadership Board inaccurately inflated presumed finance savings resulting from ESPC cancellations. The ESPC contracting officer provided a copy of the spreadsheet he developed to track this data. However, after reviewing the information, we determined it mischaracterized “presumed financing savings.” The spreadsheet does not differentiate between service period expenses and interest charges; instead it lumps them together and uses the total remaining annual payments in calculating financing savings. Service period expenses include operation, maintenance, and other expenses that are period specific and not used in calculating interest expenses. Furthermore, operation and maintenance expenses do not become unnecessary once a contract is cancelled. Therefore, these expenses should not be used in calculating financing savings.

For example, the ESPC contracting officer's data sheet states the cancellation of the Archives I ESPC would provide a presumed financing savings of \$407,460. However, only \$102,878 of that amount is attributable to interest. The majority of the “savings” comes from NARA no longer paying the contractor for operation and maintenance services at Archives I—including those associated with the newly installed \$3.8 million boilers. Furthermore, for an interest savings of \$102,878 generated by cancelling the contract early, NARA has released the contractor from its responsibility of guaranteeing millions in previously unverified energy cost savings over the remaining 5 year life of the contract.

In addition, as stated earlier, NARA agreed to pay large front end fees in order for the contractors to procure financing for a number of its ESPCs. For example, on the Archives I ESPC, NARA paid \$4.7 million in pre-acceptance costs and agreed to pay \$232,508 for the contractor to procure an additional \$1,103,713 in financing—which was added into the total amount financed. 14 months after acceptance NARA cancelled the seven year ESPC by accepting and paying a \$994,960 termination liability—which included a 3 percent cancellation penalty fee. However, during this 14 month duration, NARA made payments to the contractor totaling \$592,881—of which \$470,270 is attributable to principal repayment and interest. The following chart depicts the total cost NARA paid to finance \$1.1 million:

Finance procurement price:	\$232,508
Principal and interest payments:	\$470,270
Cancellation liability and fee:	\$994,960
Total procurement, payment, and termination fees:	\$1,697,738
Initial amount financed:	\$1,103,713
<b>Cost of borrowing \$1.1M for 14 months:</b>	<b>\$594,025</b>
Cost as a percentage of initial amount financed:	53.8%

If the figures above were calculated based on the same formula the ESPC contracting officer uses when providing the CFO presumed financing savings of cancelling ESPCs, the full amount of the contractor payments (\$592,881) would be used instead of just the interest and principal (\$470,270). This would have resulted in the cost of borrowing \$1.1 million for 14 months to total \$716,636—or 64.9 percent of the initial amount financed. However, the calculations above are all based on data contained in the task order schedules that were in NARA’s possession at the time of the award.

As noted earlier, after already accepting these high upfront costs, the interest savings over the remaining five years only totaled \$102,878. Again, these interest savings attributed to not waiting “to the end of the term” should be compared to the remainder of the unverified \$6.9 million in guaranteed energy cost savings NARA forfeited when it cancelled the contract. Following our interview, the ESPC contracting officer contacted one of his points of contact at FEMP informing him of the concern with the high cost to obtain financing. The FEMP point of contact stated—with the caveat he is a “contractor employee, not a [contracting officer] or lawyer”—the cost of obtaining financing is deceptive; it is “mostly the interest accrued during construction...then converted into the total long-term loan upon acceptance.” If that is the case—despite paying \$4.7 million up front—NARA agreed to allow the contractor to finance an additional \$1.1 million for 21 months (the time of contract award until acceptance) for an accrued interest cost of



\$232,508. This reflects an annual interest rate in excess of 12 percent—during a time when the US Treasury index rate was 2.58 percent.

There is little evidence Federal and DOE requirements concerning allowable cancellation payments were considered when cancelling ESPCs at the end of FY 2012. Further, NARA has to a degree inflated the savings attributed to the cancellations and undermined the value of the guaranteed cost savings it gave up—the importance of which is even greater considering NARA’s lack of appropriate savings verification during the contract terms. In addition, although NARA acted quickly to cancel and pay off ESPCs in order to realize presumed finance savings, greater savings may have been realized if considerations to up front costs had been made during contract negotiations.

*Cancellation Obligations*

10 CFR 436 states “in the event an ESPC is terminated for the convenience of a Federal agency, the termination liability of the Federal agency shall not exceed the cancellation ceiling set forth in the contract for the year in which the contract was terminated.” These cancellation ceiling schedules—which are part of the ESPC task order documentation NARA had in its possession since the time of the awards—contain the total costs the agency pays (including applicable termination fees) when it meets the established criteria for early pay offs. The schedules for the three ESPCs NARA cancelled at the end of FY 2012 include built-in termination fees ranging from 2.75 to 5.89 percent. Further, most of the schedules reviewed included prominently highlighted cancellation fee percentages or statements such as “Cancellation Ceilings for each time period specified [in the contract schedule] establish the maximum termination liability for that time period.” However, when the CFO presented the early pay off totals for each of the ESPCs during the September 12, 2012 Executive Leadership Team meeting, he included an additional five percent early termination fee—which exceeded the cancellation ceilings set forth in the contracts. The chart below details the obligated cancellation amounts and payment information.

ESPCs Cancelled in FY 2012	Cancellation Date	Amount Obligated at Cancellation	Actual Cancellation Amount	Invoice Date
Ronald Reagan Facility	9/26/2012	\$680,090	\$633,261	10/26/2012
John F. Kennedy Facility	9/26/2012	\$6,748,558	\$6,348,413	11/1/2012
Archives I Facility	9/26/2012	\$1,074,141	\$994,960	10/22/2012
Totals		\$8,502,789	\$7,976,634	
Difference		<b>\$526,155</b>		

Following the Executive Leadership Team's approval, the ESPC contracting officer issued modifications to each of the three ESPCs selected for cancellation. These modifications referenced obligations for the same amounts presented to the Executive Leadership Team, which totaled approximately \$8.5 million (as shown in the chart above). Next the ESPC contracting officer began contacting the ESCOs to inform them of the cancellations. For example, on September 27, 2012, the ESPC contracting officer e-mailed the Archives I ESCO stating NARA "decided to take advantage of FY 2012 year end funding" and pay off the contract. Further, he attached the contract modification that included the obligated amount—which exceeded the cancellation ceiling amount by eight percent—and told the ESCO "you may invoice NARA for this total amount."

Three weeks later, the Archives I ESCO responded to inform NARA's ESPC contracting officer that the amount he instructed for invoicing was more than what was necessary for the pay off. The ESCO referenced the contract's Monthly Termination Liability-Cancellation Ceiling Schedule and provided two payment amounts directly off the schedule (depending on which month NARA was expected to issue payment). When asked why he included an extra 5 percent in all of the cancellation notices, the ESPC contracting officer stated a contractor from FEMP told him and the Director of Facility and Property Management that this was the amount. The ESPC contracting officer provided an e-mail from the Director documenting this conversation. The July 27, 2012 e-mail states the FEMP contractor "was driving and didn't have the contract in front of him but he thinks the payoff is either 3 percent or 5 percent depending on which contract [NARA] awarded under." There is a hand written note at the bottom of the e-mail signed by the ESPC contracting officer stating 5 percent was confirmed during a meeting with the FEMP contractor in September 2012. However, this does not reflect the information contained within each of the ESPC Task Order Cancellation Ceiling Schedules NARA initially accepted. Only one of the contracts reviewed—the Archives II ESPC—lists 5 percent as the cancellation fee, and this contract was not even cancelled at the end of FY 2012.

In reviewing the actual payments made from the obligations, we determined NARA obligated over \$526,000 in excess of the cancellation ceilings set forth in the contracts (as shown in the chart above). In an interview with the CFO he stated he knew they were obligating too much, stating they were based upon estimates at the time. However, the schedules that include the pay off amounts were in NARA's possession since the time of award. Further, by making these obligations within days of the end of FY 2012 and informing the ESCO to bill for the amount the ESPC contracting officer over obligated in the modification, NARA placed itself at risk of over payment.

Further, in the case of the cancellation of the Archives I ESPC, NARA had the option to pay \$990,289 by November 1, 2012 or \$994,960 on December 1, 2012. NARA's contracting officer opted for the later payment, which cost \$4,671 more in interest. After reviewing the actual payment information, we discovered NARA was invoiced and made the payment in October 2012; therefore NARA should have only paid \$990,289. When we brought this to the ESPC contracting officer's attention in May 2013, he contacted the ESCO in an effort to recover the money. However, due to the ESPC contracting officer initially agreeing to the December 1, 2012 amount, the ESCO's agent did not make the payment to the financing bank until that date—despite having possession of the \$994,960 payment since October 26, 2012. As a result the ESCO stated the interest is not recoverable.

In addition, the ESPC contracting officer instructed the Archives I ESCO they were allowed to invoice contingent upon the completion of “the current M&V report, onsite services, or other associated activities in closing this Delivery/Task Order with NARA.” However, when the ESCO invoiced NARA on October 22, 2012—and was subsequently paid on October 26, 2012—it had not completed all of these activities. For example, for performance year 2—which spans August 1, 2012 through July 31, 2013—NARA paid \$25,720 for maintenance and operation and an additional \$25,160 for M&V. At the time the ESCO received its final payment, less than a quarter of performance year 2 was complete and the M&V reports for performance year 1 and year 2 had yet to be provided—however, the full payment was approved and paid by NARA.

#### *Cancellation Payment Funding*

DOE Final Rule 10 CFR 436 Subpart B states “any amount paid by a Federal agency pursuant to any ESPC... may be paid only from funds appropriated or otherwise made available to the agency for the payment of energy expenses and related operation and maintenance expenses *which would have been incurred without an ESPC* [emphasis added].” Further, DOE FEMP guidance states NECPA, as amended, “retains the limitation that payments to a contractor cannot exceed the amount an agency would pay for utilities (or utility related costs) in the absence of an ESPC. This limitation means that appropriated funds that would not be applied to utility costs or utility related costs in the absence of an ESPC, cannot be applied to an ESPC.”

Despite these funding limitations found in Federal and DOE policy, there is a misconception among Business Support Services personnel interviewed that any remaining end of year money can be used to pay off ESPCs. This misconception goes back to at least May 12, 2006, when the current Director of Facility and Property Management issued a memorandum, through the ESPC contracting officer, to the former

Assistant Archivist for Administration, seeking approval for the Archives II ESPC. In the memorandum, the Director states “the contract also contains an escrow account where...end of the year money can be placed for future buy down of the contract should management desire to shorten the term.” More recently, when the ESPC contracting officer contacted the Archives I ESCO to cancel the ESPC, he stated NARA was doing so “to take advantage of FY 2012 year end funding.”

In our initial interview with the CFO, he acknowledged he paid down the ESPCs with year end money, stating he “could have just as easily spent [it] on monitors or server racks.” In a later meeting, the CFO stated each year NARA’s operating expense appropriation is allocated across the agency, as the year progresses it all becomes more centralized and everything is pooled together. The CFO stated that the \$8.5 million used to fund the ESPC cancellations at the end of FY 2012 came from this end of year pool of funds—as opposed to funds attributable to energy cost savings.

Further, as reported in NARA’s Annual Energy and Greenhouse Gas Report, total agency-wide utility costs amounted to \$11.5 million in FY 2012. During this same time period, NARA obligated funds totaling over \$11.2 million in ESCO annual and cancellation payments—resulting in actual payments of \$10.7 million in FY 2012 funds. Therefore, in FY 2012 NARA spent approximately \$22.2 million (\$11.5 million + \$10.7 million) on ESPC and utility expenses. Considering NARA’s average annual agency-wide utility expense is under \$13.7 million for the last seven years, it is highly improbable NARA’s \$22.2 million in FY 2012 utility and ESPC payments have not exceeded the amount it would have paid for utilities without the ESPCs.

### **Recommendations**

We recommend the Executive for Business Support Services:

1. Define roles within Business Support Services for the contracting oversight of ESPCs;
2. Establish procedures to ensure DOE facilitator, NGC, and OCFO involvement in negotiations and cancellations of ESPCs;
3. Ensure personnel from the Offices of the CFO and Facility and Property Management charged with reviewing M&V reports, negotiating contracts, and approving and funding payments are thoroughly trained in Federal and DOE ESPC policies;
4. Develop an oversight process for the timely review of M&V reports for accuracy and completeness;

5. Maintain documentation that supports NARA's efforts to contest inaccurate or inadequate ESCO reporting;
6. Implement controls to ensure ESPC contracting documentation is finalized and appropriate negotiation, review, and risk assessment activities take place prior to award;
7. Develop NARA operating procedures that include provisions for timely involvement of DOE in NARA's future ESPC negotiations and documentation review;
8. Establish formal assessment criteria and future savings analysis for use in determining whether to cancel ESPCs;
9. Implement control procedures to ensure all future annual reporting to OMB and DOE accurately reflects ESPC payments and cancellations; and
10. Assess whether advanced payments made to the contractors of ESPCs that were subsequently cancelled can be recouped for services that had not been performed prior to cancellation.

Management Response

Management concurred with the recommendations.

## Appendix A – Acronyms and Abbreviations

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CFO	Chief Financial Officer
CFR	Code of Federal Regulations
DOE	Department of Energy
ECM	Energy Conservation Measure
E+O&M	Energy-Related Operations & Maintenance Expenses
EPAct	Energy Policy Act
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
FEMP	Federal Energy Management Program
FY	Fiscal Year
GSA	General Services Administration
IGA	Investment Grade Audit
M&V	Measurement and Verification
MWH	Megawatt Hours
NARA	National Archives and Records Administration
NECPA	National Energy Conservation Policy Act
NGC	National Archive’s General Counsel
OIG	Office of Inspector General
OMB	Office of Management and Budget
O&M	Operations & Maintenance
U.S.C.	United States Code

## Appendix B – Funds to Better Use and Questionable Payments

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The following details funds to better use and questionable payments related to NARA's ESPC projects identified throughout the report. These costs and payments amount to **over \$8.4 million**.

Finance Procurement Costs—based on the documentation provided, NARA typically pays procurement charges of approximately eight to 12 percent of the amount financed for each ESPC (this is also dependent upon the duration of the implementation period). However, for the Archives I ESPC—which was awarded hurriedly at the end of FY 2009—NARA agreed to pay 21 percent. If NARA had negotiated a rate similar to the one used in a previous award to the same contractor, NARA would have saved approximately **\$100,100**. (See pages 10 and 24 of the report).

Premium Cost Over Swap Index Rate—NARA used the same contractor for the Archives I and Archives II ESPCs. When NARA awarded the Archives II ESPC, it agreed to pay a 0.56% premium over the US Treasury Swap Index Rate. However, later, when NARA hurriedly awarded the Archives I ESPC at the end of FY 2009, it agreed to pay a premium of 3.19%. If NARA had negotiated a rate similar to the one used in its previous award, NARA would have saved approximately **\$58,000** prior to the cancellation of the contract. (See page 10 of the report).

Overhead Costs—NARA used the same contractor for the Archives I and Archives II ESPCs. When NARA awarded the Archives II ESPC, it agreed to pay an overhead rate of 24 percent on service period activities. However, later, when NARA hurriedly awarded the Archives I ESPC at the end of FY 2009, it agreed to pay an effective overhead rate of 30 percent. If NARA had negotiated a rate similar to the one used in its previous award, NARA would have saved approximately **\$5,500** prior to the cancellation of the contract. (See page 10 of the report).

M&V Report Charges—Based on the ESPC data provided, NARA spent on average \$26,109 annually (plus an additional 24 percent or more in indirect and profit charges) per M&V report. However, in some cases, reports indicated limited measurement and testing took place during the contract year. In addition, NARA cancelled and paid off contracts without receiving M&V reports for the year of the cancellations (which had been paid in advance). The total questionable payments associated with these inadequate or non-delivered M&Vs amount to over **\$94,700**. (See pages 14 and 27 of the report).

ESPC Payments in Excess of Energy Cost Savings—based on NARA’s energy cost savings verification method, which relies solely on utility bill cost comparisons, NARA made payments in excess of verified cost savings for the Archives I and Archives II ESPCs. This resulted in inadequately verified and questionable payments of nearly **\$7.7 million** in funds to better use. (See pages 15-18 of the report).

Excessive Obligations for ESPC Cancellation Payments—NARA did not use the amounts used in the cancellation ceiling schedules of the contracts when obligating funds for their payoffs. Instead, the ESCP contracting officer added an additional 5 percent premium to the maximum allowable payment and told at least one contractor to bill for that excessive amount. NARA had over obligated approximately **\$526,100** in funds that could have been put to better use. (See pages 25 and 26 of the report).

Questionable Charge on Cancellation Payment—when NARA cancelled the Archives I ESPC at the end of FY 2012, it had the option of paying \$990,289 by November 1, 2012 or \$994,960 on December 1, 2012. Although NARA made the payment on October 26, 2012, it was charged \$994,960, resulting in a questionable overpayment of **\$4,671**. (See page 27 of the report).



## Appendix C - Management's Response to the Report

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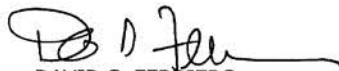
To: James Springs, Acting Inspector General

From: David S. Ferriero, Archivist of the United States

Subject: OIG Revised Draft Audit 14-01, Audit of the Management and Oversight of NARA's Energy Savings Performance Contracts

Thank you for the opportunity to provide comments on this draft report. We appreciate your willingness to meet and clarify language in the report.

We concur with all ten recommendations in this audit, and we will address them further in our action plan.



DAVID S. FERRIERO  
Archivist of the United States

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